

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	SMITH ET AL.	Examiner:	OGDEN JR, NECHOLUS
Serial No.:	10/825,389	Group Art Unit:	1796
Filed:	APRIL 15, 2004	Docket No.:	1804US01
Confirmation No.:	8462		
Title:	FOAMING SOAP, AND METHODS		

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**APPELLANTS' REPLY BRIEF**

Commissioner for Patents  
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Alexandria, VA 22313-1450

This is in reply to the Examiner's Answer mailed February 12, 2009.

ARGUMENT

The Examiner filed an Answer on February 2, 2009. Appellants maintain that the claims in the application are patentable for the reasons cited in the Appeal Brief of November 13, 2008 and those arguments are incorporated into this Reply Brief.

In addition, Appellants wish to address the statement in the Examiner's Answer that the "examiner is unable to locate the alleged teaching of synthetic surfactants and asserts that appellant has failed to prove this teaching by Uehira et al." Appellants respectfully disagree with this statement.

The Examiner states that Uehira et al. is only relied upon for teaching a foaming head that "transforms liquid soaps into foaming composition upon dispensing." See Examiner's Answer, Page 6. The Examiner also states that "Appellant argues that Uehira et al adds surfactants to impart foam (col. 4, lines 50-55) and therefore would not be combinable with Gross et al. Again, the examiner is unable to locate any suggestion of synthetic surfactants disclosed in Uehira et al." See Examiner's Answer, Page 7.

Appellants respectfully submit that, as pointed to in the Appeal Brief and correctly cited by the Examiner in the Examiner's Answer, at col. 4, lines 50-55, Uehira et al. states that surfactants are added to the foamable liquids for use with the foaming heads disclosed therein. Specifically, Uehira et al. states:

Referring to FIG. 1, a cylindrical container 1, formed by, e.g., blow molding a resin or the like, carries up to its maximum fill level w, a formable liquid A to which *a surfactant or the like is added to impart foaming properties when mixed with air.* See Uehira et al., col. 4, lines 50-55 (emphasis added).

Appellants respectfully submit that this section of Uehira et al. clearly teaches that a surfactant is added to the foamable liquids for use with the dispensers disclosed therein. Thus, in order to foam a liquid using the dispenser of Uehira et al., Uehira et al. clearly teaches that a

surfactant is added to impart foaming properties. This is not the same as the liquid soaps for use in the soap products of the presently claimed invention. That is, the liquid soaps for use in the present invention *consist of* an alkali salt of a fatty acid and optional ingredient, wherein the optional ingredient *does not* include surfactants.

The Examiner's Answer also states that "Uehira et al is relied upon only for the use of heads employed for dispensing liquid soaps. Accordingly, one of ordinary skill in the art, absent a showing to the contrary, would have been motivated to combine a liquid soap to a liquid soap foaming dispenser with the expectation of reasonable success in view of the teachings disclosed in Gross et al and Uehira et al..." Appellants disagree.

Appellants respectfully submit that there would be no motivation to combine the soap product of Gross with the dispenser of Uehira et al. Foamable liquids for use with the dispenser of Uehira et al. have surfactants or the like added to them to impart foaming properties to the liquids. *See* Uehira et al., col. 4, lines 50-55. Gross is silent with respect to the characteristics, e.g., viscosity, a liquid soap produced by the disclosed process would have. Nor does Gross disclose the use of surfactants.

Further, there is no teaching, suggestion or motivation in the cited references, or the art generally, to dispense the soap of Gross as a *foam*. As Gross is directed primarily to solid soap products, the characteristics of a liquid soap produced by the process of Gross are unknown. As is discussed in the instant specification, not all liquid soaps are meant to be foamed. For example, many handsoaps have viscosities that are not conducive to being foamed, and are therefore dispensed as thickened handsoaps. Thus, it is not obvious that one of skill in the art would need to dispense the soap of Gross through a foam dispenser in order to effectively deliver

the soap. Nor is there any teaching that the liquid soap products disclosed in Gross would be capable of being foamed, with or without the addition of a surfactant or foam enhancing agent.

SUMMARY

Appellants' invention is directed to a soap product consisting of a non-propellant dispenser comprising a liquid retaining container and a foam dispenser head. Liquid soap is present in the container, and the liquid soap consists of an alkali salt of a C6 to C24 fatty acid, and an additional ingredient. The additional ingredient is selected from the group consisting of water, antioxidants, water softening agents, preservatives, solubilizers, color, fragrances, pH modifiers and mixtures thereof. The liquid soap has a viscosity less than 100cps.

Gross does not teach a liquid soap as is presently claimed. Uehira does not teach that a liquid soap as presently claimed can be dispensed through a foam dispensing head without the addition of surfactants to impart foaming properties.

Appellants accordingly request that the 35 U.S.C. §103(a) rejection be reversed.

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers or any future reply, if appropriate. Please charge any additional fees or credit overpayment to Deposit Account No. 501257.

**43896**

PATENT TRADEMARK OFFICE

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